

REMARKS


The amendments herein rectify an error inadvertently introduced into the specification and claim 1 prior to their original filing. This amendment is not new matter, as the additional R<sup>1</sup> group of formula Ia is necessarily present and facilitates formation of a coordinative bond between the nitrogen - E - and the transition metal - M - in this formula. Review of the specification amply supports this conclusion.

In view of the foregoing amendments and remarks, applicants consider that the rejections of record have been obviated and respectfully solicit passage of the application to issue.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'David C. Liechty', with a long horizontal flourish extending to the right.

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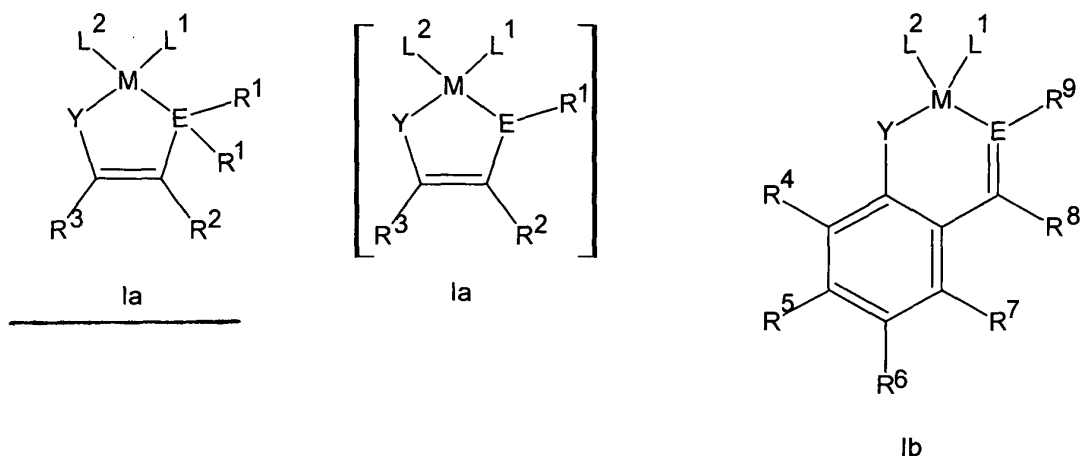
DCL/kas

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION**

Please replace lines 11 to 25 of page 1 with the following:

- a1) a complex compound of the general formula Ia and/or Ib

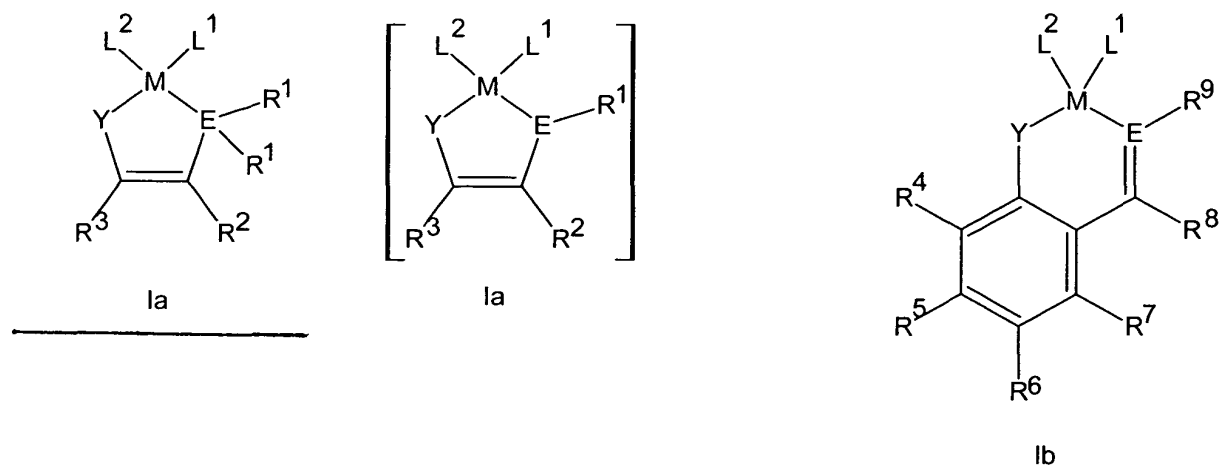


in which the substituents and indices have the following meaning:

**IN THE CLAIMS**

Please amend claim 1 to read as follows:

1. Process for the production of aqueous polymer dispersions by the reaction of one or more olefinically unsaturated compounds in aqueous medium in the presence of  
a1) a complex compound of the general formula Ia and/or Ib



in which the substituents and indices have the following meaning:

- M a transition metal of groups 7 to 10 of the periodic system of the elements,
- L phosphanes  $(R^{16})_xPH_{3-x}$  or amine  $(R^{16})_xNH_{3-x}$  having identical or different substituents  $R^{16}$ , ethers  $(R^{16})_2O$ ,  $H_2O$ , alcohols  $(R^{16})OH$ , pyridine, pyridine derivatives of the formula  $C_5H_{5-x}(R^{16})_xN$ ,  $CO$ ,  $C_1C_{12}$  alkyl nitriles,  $C_6C_{14}$  aryl nitriles or ethylenically unsaturated double-bonded systems, x standing for an integer between 0 and 3,
- $L^2$  halide ions, amide ions  $(R^{16})_hNH_{2-h}$ , h standing for an integer between 0 and 2, and furthermore  $C_1$ - $C_6$ -alkyl anions, allyl anions, benzyl anions or aryl anions, wherein  $L^1$  and  $L^2$  can be linked to one another by means of one or more covalent bonds,
- E nitrogen,
- Y oxygen, sulfur,  $N-R^{10}$  or  $P-R^{10}$ ,

$R^1$  hydrogen,  $C_1$ - $C_{12}$ -alkyl groups,  $C_7$ - $C_{13}$  aralkyl substituents or  $C_6$ - $C_{14}$  aryl groups,

$R^2, R^3$  independently of one another

hydrogen,

$C_1$ - $C_{12}$  alkyl, wherein the alkyl groups can be branched or unbranched,

$C_1$ - $C_{12}$  alkyl, singly or multiply substituted by identical or different  $C_1$ - $C_{12}$

alkyl groups, halogens,  $C_1$ - $C_{12}$  alkoxy groups or  $C_1$ - $C_{12}$  thioether groups,

$C_7$ - $C_{13}$  aralkyl,

$C_3$ - $C_{12}$  cycloalkyl,

$C_3$ - $C_{12}$  cycloalkyl, singly or multiply substituted by identical or different  $C_1$ - $C_{12}$

alkyl groups, halogens,  $C_1$ - $C_{12}$  alkoxy groups or  $C_1$ - $C_{12}$  thioether groups,

$C_6$ - $C_{14}$  aryl,

$C_6$ - $C_{14}$  aryl, identically or differently substituted by one or more  $C_1$ - $C_{12}$  alkyl

groups, halogens, singly or multiply halogenated  $C_1$ - $C_{12}$  alkyl groups,  $C_1$ -

$C_{12}$  alkoxy groups, silyloxy groups  $OSiR^{11}R^{12}R^{13}$ , amino groups  $NR^{14}R^{15}$  or

$C_1$ - $C_{12}$  thioether groups,

$C_1$ - $C_{12}$  alkoxy groups,

silyloxy groups  $OSiR^{11}R^{12}R^{13}$ ,

halogens or

amino groups  $NR^{14}R^{15}$

wherein the substituents  $R^2$  and  $R^3$  can form a saturated or unsaturated 5- to 8-membered ring with one another,

$R^4$  to  $R^7$  independently of one another

hydrogen,

$C_1$ - $C_{12}$  alkyl, wherein the alkyl groups can be branched or unbranched,

$C_1$ - $C_{12}$  alkyl, singly or multiply substituted by identical or different  $C_1$ - $C_{12}$  alkyl groups, halogens,  $C_1$ - $C_{12}$  alkoxy groups or  $C_1$ - $C_{12}$  thioether groups,

$C_7$ - $C_{13}$  aralkyl

$C_3$ - $C_{12}$  cycloalkyl,

$C_3$ - $C_{12}$  cycloalkyl, singly or multiply substituted by identical or different  $C_1$ - $C_{12}$  alkyl groups, halogens,  $C_1$ - $C_{12}$  alkoxy groups or  $C_1$ - $C_{12}$  thioether groups,

$C_6$ - $C_{14}$  aryl,

$C_6$ - $C_{14}$  aryl, identically or differently substituted by one or more  $C_1$ - $C_{12}$  alkyl groups, halogens, singly or multiply halogenated  $C_1$ - $C_{12}$  alkyl groups,

$C_1$ - $C_{12}$  alkoxy groups, silyloxy groups  $OSiR^{11}R^{12}R^{13}$ , amino groups

$NR^{14}R^{15}$  or  $C_1$ - $C_{12}$  thioether groups,

$C_1$ - $C_{12}$  alkoxy groups

silyloxy groups  $OSiR^{11}R^{12}R^{13}$ ,

halogens

$NO_2$  groups or

amino groups  $NR^{14}R^{15}$ ,

wherein pairs of neighboring substituents  $R^4$  to  $R^7$  can form a saturated or unsaturated 5- to 8-membered ring with one another,

$R^8, R^9$  independently of one another

hydrogen,

$C_1$ - $C_6$  alkyl groups,

$C_7$ - $C_{13}$  aralkyl substituents or

$C_6$ - $C_{14}$  aryl groups, optionally substituted by one or more  $C_1$ - $C_{12}$  alkyl groups,

halogens, singly or multiply halogenated  $C_1$ - $C_{12}$  alkyl,  $C_1$ - $C_{12}$  alkoxy groups,

silyloxy groups  $OSiR^{11}R^{12}R^{13}$ , amino groups  $NR^{14}R^{15}$  or  $C_1$ - $C_{12}$  thioether groups,

$R^{10}$  to  $R^{15}$  independently of one another

hydrogen,

$C_1$ - $C_{20}$  alkyl groups, which on their part may be substituted by  $O(C_1$ - $C_6$

alkyl) or  $N(C_1$ - $C_6$  alkyl) $_2$  groups,

$C_3$ - $C_{12}$  cycloalkyl groups,

$C_7$ - $C_{13}$  aralkyl substituents or  $C_6$ - $C_{14}$  aryl groups

$R^{16}$  hydrogen,

$C_1$ - $C_{20}$  alkyl groups, which for their part may be substituted by  $O(C_1$ - $C_6$  alkyl) or

$N(C_1$ - $C_6$  alkyl) $_2$  groups,

$C_3$ - $C_{12}$  cycloalkyl groups,

$C_7$ - $C_{13}$  aralkyl substituents or  $C_6$ - $C_{14}$  aryl groups,

b) dispersing agents and optionally

- c) organic solvents having low solubility in water,
- d) the metal complexes a1) being dissolved in a portion or the total quantity of the olefinically unsaturated compounds and/or of the organic solvents c) having low solubility in water and
- e) the portion or the total quantity of the olefinically unsaturated compounds and/or of the organic solvents c) having low solubility in water which holds the metal complexes a1) in solution being present in the aqueous medium as a dispersed phase having an average droplet diameter  $\leq 1,000$  nm.